AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the

application:

LISTING OF CLAIMS:

1. (previously presented): An automatic color correction apparatus for carrying out color

correction upon a specific object in a color image, said apparatus comprising

an object color information memory for memorizing split hue regions obtained by

splitting a hue distribution region of the specific object as well as a distribution frequency;

representative color extracting means for extracting a representative color of the specific

object from a given input image with reference to the memory content of the object color

information memory;

a color correction parameter memory for memorizing color correction parameters

assigned to the split hue regions;

color correction parameter determining means for determining from the memory content

of the color correction parameter memory an optimum color correction parameter adapted to the

representative color extracted by the representative color extracting means, and

color correction processing means for carrying out color correction acting upon a specific

color by the use of the optimum color correction parameter determined by the color correction

parameter determining means.

2. (previously presented): An automatic color correction apparatus as claimed in claim

1, further comprising:

an extended object color information memory for memorizing split regions obtained by

splitting a distribution range related to a hue, a saturation, or a brightness of the specific object or

a combination thereof obtained by analyzing a plurality of images preliminarily picked up for the

specific object under various image pickup environments as well as the distribution frequency;

said representative color extracting means

obtaining a histogram of the hue, the saturation, or the brightness of the specific

object in the input image or the combination thereof with reference to the split regions

related to the hue, the saturation, the brightness, or a combination thereof,

multiplying the distribution frequency memorized in said extended object color

information memory by the histogram, and

extracting as the representative color of the specific object a color present in a

region having a maximum value as a result of multiplication.

3. (original): An automatic color correction apparatus as claimed in claim 1, wherein the

representative color extracting means extracts the representative color of the specific object by

the use of the variance of coordinate positions in the image in addition to the distribution

frequency related to a hue, a saturation, or a brightness of the specific object or a combination

thereof.

4. (previously presented): An automatic color correction apparatus as claimed in claim 1, wherein the color correction parameter memory memorizes the color correction parameters assigned not only to the split hue regions of the specific object but also to split saturation regions and split brightness regions obtained by splitting a saturation distribution region and a brightness distribution region of the specific object, respectively.

5. (previously presented): An automatic color correction apparatus as claimed in claim 1, further comprising

an input-dependent object color information memory for memorizing with respect to each individual input apparatus split regions obtained by splitting a distribution range related to a hue, a saturation, or a brightness of the specific object or a combination thereof as well as a distribution frequency,

an output-dependent color correction parameter memory for holding the color correction parameter with respect to each individual output apparatus, and

input/output apparatus selecting means supplied from the outside with the type of an input/output color image processing apparatus for reading corresponding information from said input-dependent object color information memory and said output-dependent color correction parameter memory.

6. (original): An automatic color correction apparatus as claimed in claim 1, further comprising

a sample image memory for memorizing a plurality of kinds of sample color images of

the specific object,

manual color correction processing means responsive to an external instruction for

entering color information of said color images memorized in said sample image memory, and

color correction parameter generating means for generating the color correction

parameters to be memorized in the color correction parameter memory with reference to the

information supplied from the manual color correction processing means.

7. (previously presented): An automatic color correction method for carrying out color

correction upon a specific object in a color image, said method comprising the steps of

extracting a representative color of the specific object from a given input image,

determining, with reference to the content of a color correction parameter memory for

memorizing color correction parameters assigned to split hue regions obtained by splitting a hue

distribution region of the specific object, an optimum color correction parameter adapted to the

representative color extracted in the preceding step, and

carrying out color correction acting upon a specific color by the use of the optimum color

correction parameter.

8. (previously presented): An automatic color correction method as claimed in claim 7,

wherein the color correction parameter memory memorizes the color correction parameters

assigned not only to the split hue regions of the specific object but also to split saturation regions

5

and split brightness regions obtained by splitting a saturation distribution region and a brightness

distribution region of the specific object, respectively.

9. (original): An automatic color correction method as claimed in claim 7, wherein the

step of extracting the representative color extracts the representative color of the specific object

by the use of the variance of coordinate positions in the image in addition to the distribution

frequency related to a hue, a saturation, or a brightness of the specific object, or a combination

thereof.

10. (previously presented): A recording medium storing an automatic color correction

control program for controlling an automatic color correction apparatus to carry out color

correction upon a specific object in a color image, said automatic color correction control

program

controlling the automatic color correction apparatus to make the automatic color

correction apparatus carry out operations of extracting from a given input image a representative

color of the specific object,

assigning color correction parameters to split hue regions obtained by splitting a hue

distribution region of the specific object,

determining an optimum color correction parameter adapted to the representative color

extracted as mentioned above, and

carrying out color correction acting upon a specific color by the use of the optimum color

correction parameter.

11. (previously presented): A color correction apparatus for carrying out color

correction upon a specific object in a color image, said apparatus comprising:

representative color extracting means for extracting a representative color of a specific

object from a given input image;

color correction parameter determining means for determining an optimum color

correction parameter for said representative color based on color correction parameters assigned

to a range of color distribution of the said specific object may have; and

color correction processing means for carrying out color correction acting upon color

including said representative color of said specific object based on said optimum color correction

parameter.

12. (previously presented): A color correction apparatus for carrying out color

correction upon a specific object in a color image, said apparatus comprising:

representative color extracting means for extracting a representative color of a specific

object from a given input image;

color correction parameter determining means for determining an optimum color

correction parameter for said representative color based on color correction parameters assigned

to a range of color distribution of the said specific object may have, and

color correction processing means for carrying out color correction acting upon color

including said representative color of said specific object based on said optimum color correction

parameter.

13. (previously presented): A color correction method for carrying out color correction

upon a specific object in a color image, said method comprising the steps of:

extracting a representative color of a specific object from a given input image;

determining an optimum color correction parameter for said representative color based on

color correction parameters assigned to a range of distribution of the color that said specific

object may have; and

carrying out color correction acting upon color of said specific object based on said

optimum color correction parameter.

14. (previously presented): A color correction method for carrying out color correction

upon a specific object in a color image, said method comprising the steps of:

extracting a representative color of a specific object from a given input image;

determining an optimum color correction parameter for said representative color based on

color correction parameters assigned to a range of distribution of the color that said specific

object may have; and

carrying out color correction acting upon color including said representative color of said

specific object based on said optimum color correction parameter.

15. (currently amended): A color correction method, comprising: for carrying out color correction using color correction parameters;

wherein the color correction parameters are obtained based on only a range of color distribution of a specific object.